

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An information recording method for recording information in an optical recording medium having at least stacked first and second information recording layers, ~~where information is recorded~~ the method comprising:

~~by~~ projecting a pulse-like laser beam whose power is modulated between a plurality of levels, including at least a recording power, onto the optical recording medium via a light incidence plane; and

forming thereon a plurality of recording marks selected from a group consisting of several types of recording marks with different lengths; ~~and the information recording method comprising a step of~~

setting the recording powers of a top pulse and/or a last pulse of the laser beam used when at least one recording mark is to be formed in the first information recording layer to be lower than the recording power of a multi-pulse thereof, thereby recording information in the first information recording layer, wherein the first information recording layer is located on a side of the light incidence plane with respect to the second information recording layer.

2. (Canceled)

3. (Original) An information recording method in accordance with Claim 1, wherein the recording power of the top pulse and the recording power of the last pulse are set to be at the same level.

4. (Original) An information recording method in accordance with Claim 1, wherein information is recorded in the second information recording layer with the recording

powers of the top pulse and/or the last pulse of the laser beam set to be substantially the same as the recording power of the multi-pulse thereof.

5. (Currently Amended) An information recording method in accordance with Claim 1, wherein a wavelength ( $\lambda$ ) of the laser beam and a numerical aperture (NA) of an objective lens satisfy the condition that the wavelength divided by the numerical aperture ( $\lambda/NA$ ) is equal to or shorter than 700 nm.

6. (Currently Amended) An information recording method in accordance with Claim 1, wherein the laser beam has a wavelength ( $\lambda$ ) of between 200 to 450 nm.

7. (Currently Amended) An information recording apparatus for recording information in an optical recording medium, the information recording apparatus comprising:  
having

at least ~~stacked~~ first and second information recording layers where information is recorded by projecting a pulse-like laser beam ~~whose having power is~~ modulated between a plurality of levels including at least a recording power onto the optical recording medium via a light incidence plane and forming thereon a plurality of recording marks selected from a group consisting of several types of recording marks ~~with having~~ different lengths, the information recording apparatus being constituted so as to set the recording powers of a top pulse and/or a last pulse of the laser beam used when information is to be recorded in the first information recording layer to be lower than the recording power of a multi-pulse thereof, wherein the first information recording layer is located on a side of the light incidence plane with respect to the second information recording layer.

8. (Canceled)

9. (Original) An information recording apparatus in accordance with Claim 7, wherein information is recorded in the second information recording layer with the recording

powers of the top pulse and/or the last pulse of the laser beam set to be substantially the same as the recording power of the multi-pulse thereof.

10. (Currently Amended) An information recording apparatus in accordance with Claim 7, wherein a wavelength ( $\lambda$ ) of the laser beam and a numerical aperture (NA) of an objective lens satisfy the condition that the wavelength divided by the numerical aperture ( $\lambda/NA$ ) is equal to or shorter than 700 nm.

11. (Currently Amended) An information recording apparatus in accordance with Claim 7, wherein the laser beam has a wavelength ( $\lambda$ ) of between 200 to 450 nm.

12. (Currently Amended) An optical recording medium comprising, which has at least stacked first and second information recording layers and in which information can be recorded by projecting a pulse-like laser beam whose power is modulated between a plurality of levels, including at least a recording power, onto the optical recording medium via a light incidence plane and forming thereon a plurality of recording marks selected from a group consisting of several types of recording marks with having different lengths, the optical recording medium comprising wherein the recording powers are set with setting information required for setting the recording powers of a top pulse and/or a last pulse of the laser beam used when information is to be recorded in the first information recording layer to be lower than the recording power of a multi-pulse thereof, wherein the first information recording layer is located on a side of the light incidence plane with respect to the second information recording layer.

13. (Canceled)

14. (Original) An optical recording medium in accordance with Claim 12, wherein information is recorded in the second information recording layer with the recording

powers of the top pulse and/or the last pulse of the laser beam set to be substantially the same as the recording power of the multi-pulse thereof.

15. (Currently Amended) An optical recording medium in accordance with Claim 12, which further comprises a light transmission layer and the light transmission layer has a thickness of between 30 to 200  $\mu\text{m}$ .

16. (New) A method for recording information in an optical recording medium having at least a first recording layer on at least a second recording, the method comprising:

projecting a laser beam having pulses modulated in power between a plurality of levels onto the optical recording medium via light incidence plane, wherein at least a recording power is included in the plurality of levels;

forming a plurality of recording marks on the optical recording medium; and

setting the recording power of a top pulse and a last pulse of the laser beam to a substantially equal level lower than the recording power of other pulses within the laser beam when at least one recording mark is to be formed in the first recording layer.

17. (New) The method of claim 16 wherein the first recording layer is located on a side of the light incidence plane with respect to the second recording layer.